

# **RAGLAND FARM MITIGATION BANK AMELIA COUNTY**

## **PROSPECTUS FOR A COMPENSATORY WETLAND MITIGATION BANK**

**MAY 2008**

Prepared For:

NORFOLK DISTRICT MITIGATION BANK REVIEW TEAM  
U.S. ARMY CORPS OF ENGINEERS  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
U.S. FISH AND WILDLIFE SERVICE  
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY  
VIRGINIA DEPARTMENT OF GAME AND INLAND FISHERIES

Prepared By:

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PARHAM ROAD  
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**RAGLAND FARM MITIGATION BANK  
AMELIA COUNTY**

**I. INTRODUCTION**

The purpose of this report is to provide a prospectus for the proposed development of a Compensatory Wetland Mitigation Bank at the Ragland Farm in Amelia County. The site proposed for the bank development contains 40 acres of proposed wetlands, which can be restored with increased value and potential to remain wetlands over time, and 11,527 linear feet of stream with the potential of 3,281 Unified Stream Methodology Credits. The bank sponsor, Ragland Farm Mitigation Bank, LLC, has prepared this prospectus to initiate the planning and review process for developing a wetland compensatory mitigation bank within a tract of their land known as Ragland Farm. The "Property" is located within the drainage system to the Appomattox River. The Bank will be known and referenced in all future documents as the "Ragland Farm Mitigation Bank," (RFMB). This prospectus and all future documents will be prepared in accordance with the "Federal Guidelines for the Establishment, Use and Operation of Mitigation Banks," published in Vol. 60, No. 228 of the Federal Register (28 November 1995) and pursuant to the "Virginia Standards for Use and Development of Wetlands" (Code of Virginia, Chapter 1, Title 33, Article 15 28.2-1308). We have complied with the Norfolk Districts' "Do's and Dont's List."

The bank sponsor is proposing to develop a single mitigation bank at Ragland Farm to serve compensatory wetland mitigation needs throughout its primary and adjacent HUC areas within the Appomattox River Basin. The sponsor has made an evaluation of the need for compensatory wetlands mitigation in the immediate and adjacent Hydrologic Unit Codes, and found sufficient need to justify the bank development. This report contains most of the data necessary for compiling a banking instrument. Both the wetlands and stream mitigation credits will be made available to any potential user with an

approved permit on a first come, first served basis. The sponsor will actively market such credits.

A. Site Overview: The Ragland Mitigation Bank is located on a 508.1 acre farm adjacent to the Appomattox River and its public water supply. The property was purchased with the concept of converting the cut-over timberland into operating farm within the bottomlands adjacent to the Appomattox River serving for grazing lands and hay crops. The balance of the farm would be use for crops and residential. After review of the property and position in landscape the owner decided that the property had the opportunity to create wetlands in the bottomlands and afford greater protection to the River and its use as a public water supply. The wetland mitigation would serve as buffer between the upland portions of the farm and residential areas, thus filtering the runoff and protecting the River and Public Water Supply.

We are proposing to construct 40 acres of mostly palustrine forested wetlands with the low ground swale between the high ground and the current forested buffer adjacent to the River. We are proposing to construct this in similar fashion to the Banister Bend and Willis River Mitigation Banks where we are using filter curtains to interrupt the hydrologic drainage in the top 18" of the soil, causing the water to be retained in the zone for period sufficient to meet the hydrologic parameter for a wetland bank. Both the Willis and Banister Banks have been very successful. The Ragland Farm Mitigation Bank is similar both in soils and hydrology. In addition we are proposing stream mitigation on 11,527 linear feet of 1<sup>st</sup> and 2<sup>nd</sup> order streams with 3,281 credits. Calculations via the Unified Stream Methodology are found in Appendix D. Hydrologic data has been collected in the Spring of 2008 and will be provided to the MBRT with the final Banking Instrument.

The subject property is located adjacent to State Route 646, and the Appomattox River, approximately 2 miles north of Whites Store, Virginia, located at the intersection of State Routes 708 and 623 (Appendix A).

B. Archaeological Resources: There are no known archaeological resources documented by the Virginia Department of Natural Resources for this property (Appendix C).

C. Endangered Species: There are no known endangered species documented by the United States Fish and Wildlife Service for this property (Appendix C).

## **II. PARTICIPANTS**

Koontz-Bryant, P.C. acting as the agent for Ragland Farm Mitigation Bank, L.L.C., the Bank Sponsor, has prepared this mitigation banking prospectus for the Ragland Farm Mitigation Bank, Amelia County, Virginia in cooperation and consultation with the Corps of Engineers (COE) and the Department of Environmental Quality (DEQ). Both agencies have made field reviews of the proposed site. The participating agencies responsible for reviewing this document, the Mitigation Bank Review Team (MBRT), are the U.S. Army Corps of Engineers (chair), the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Services, the Virginia Department of Environmental Quality, the Virginia Department of Game and Inland Fisheries, and other State, Federal or Local governing bodies deemed necessary or appropriate by the permanent members of the MBRT. We are requesting review of this prospectus by the MBRT in order to proceed with the Banking Instrument.

## **III. OWNERSHIP OF MITIGATION BANK LANDS**

Ownership of Ragland Farm, including all of the mitigation bank and other conservation lands will reside with the bank sponsor until such time as all of the credits have been sold and the mitigation monitoring period has expired. Also, both the COE and the DEQ must approve the bank's success prior to expiration of the monitoring period. At that time, the bank sponsor will evaluate the potential for transfer of ownership to either a non-profit conservation group or a State and/or Federal Agency. Otherwise, the property contained within the bank and upland buffers will become open space protected by a conservation

easement within the chain of title. Its use as a private property will be limited to hunting and fishing.

#### **IV. BANK GOALS AND OBJECTIVES**

The RFMB's primary goals are:

a.) Restore/Enhance a 40 acre wetlands mitigation site by restoring forested wetlands on an area adjacent to the floodplain of the Appomattox River through manipulation and restoring hydrology to the site.

b.) Restoration, Enhancement and Preservation of 11,527 linear feet of stream by planting the riparian areas, preserving forested areas and protection of the streams, riparian areas and natural wetlands with a conservation easement within the chain of title. Using the Unified Stream Methodology (Compensation Crediting From 3) to calculate the compensation credits, the Total Compensation Credit is approximately 3,281 credits (Appendix D).

The mitigation bank will provide a wetland mitigation alternative for those impacts to jurisdictional wetlands within the approved mitigation service area (MSA). The RFMB will restore and protect by conservation easement 11,527 linear feet of viable, self-sustaining stream through the mitigation site. The bank sponsor's objective through the RFMB is to construct, monitor and maintain the mitigation bank as a self-sustaining, functional wetland ecosystem until such time as the system is approved by the COE and DEQ.

It is our objective to restore this property to its former wetland condition, stabilize the streams and then place a conservation easement or deed restrictions on the property. As well, a forestry stewardship program will be developed for the riparian area adjacent to the conservation easement. The bank sponsor is expecting adequate return to guarantee the mitigation bank and

provide a reasonable rate of return on investment. An escrow account will be established to maintain the wetlands and cure any associated problem through the monitoring phase. The maintaining of the property in its natural state in perpetuity will be insured by deed restrictions within the chain of title.

## **V. MITIGATION SERVICE AREA**

The Ragland Farm Mitigation Bank is located within Hydrologic Unit Code (HUC) 02080207, a portion of the Appomattox River Basin, which will become the bank's primary service area. Pursuant to the Virginia Standards for Use and Development of Wetlands (Code of Virginia, Chapter 1, Title 33, Article 15 28.2-1308), a mitigation bank can have a mitigation service area (MSA) of all Hydrologic Unit Codes within the same river basin reach. Under this ruling, the bank may also service the adjacent HUC's 02080203, 02080205, and 02080206. These HUC's include all of Buckingham, Cumberland, Goochland, Henrico, Charles City, Chesterfield, Amelia, Prince Edward, and Powhatan; and parts of Appomattox, Amherst, Nelson, Albemarle, Fluvanna, Nottoway, New Kent, and Prince George counties. These counties will include the major cities of Richmond, Lynchburg, Hopewell, Petersburg and Colonial Heights. The Service Area is outlined in the map titled, "Bank Service Area" located in Appendix B. Service Credits will be offered on a first come, first service basis for any COE and DEQ approved impact requiring off-site mitigation within the RFMB's service area.

## **VI. EXISTING CONDITIONS**

A. Our preliminary evaluation found that the areas in the field proposed for wetland creation exhibit hydric soil conditions. The study area including approximately 40 acres is prominently flat with an elevation change of +/- 5 feet existing between two topographic lines of the 180' contours on the USGS topographic map. The area has been logged, which has left two defined logging trails and numerous areas of logging debris throughout the study area. The hydrology of the site includes some saturated areas with widely scattered small

areas of standing water. The soils of the site were primarily a dark grey sandy loam soil reading at 10YR 4/1 on the Munsels Color chart. Areas of the soils where mottles were present read 10YR 5/2 with light mottles at 10YR 4/4. The site vegetation consisted of small areas with shrubs of Sweet Gum, Willow Oak, and American Holly. The herbaceous layer included wool grass, broom sedge, seed box, greenbriar and rushes. We believe there is sufficient hydrology at this site if it is interrupted in the top foot to sufficiently produce hydrology lasting through the normal growing seasons.

The data collected to date shows that the hydrologic conditions for wetlands can be met throughout the field with minimal grading. Some lateral berms across the field will be necessary to prevent drainage through the existing and historic drainage ditches.

B. Baseline Data: A hydrologic database and conceptual plan will be enhanced and detailed in the Banking Instrument.

## **VII. PROPOSED MITIGATION PLAN**

A conceptual restoration/creation plan is presented here to restore and construct 40 acres of currently timbered land to forested wetlands, and to preserve and enhance 11,527 linear feet waters of the U.S. This plan is based on the preliminary database, existing soils, vegetation and restoration of the hydrologic parameter.

The streams (Reference Photographs 3 and 4 and Appendix B: Plans WM-1) will be protected by conservation easement in perpetuity with the following direct improvements:

- Remove existing pipes and install stream stabilization structures.
- Re-planting of the understory and completely establishing forest along the stream buffers.
- Restore the adjacent forested wetlands by improving hydrologic conditions.

Please refer to Photographs 1 and 2 showing the wetlands creation area (Photograph 1 shows the typical area proposed for wetland creation and Photograph 2 shows an example of the proposed water retention system.)

The wetlands restoration/creation will also be protected by a conservation easement in perpetuity. There will be a total of 167 acres including all natural wetlands, the restored and enhanced wetlands, the streams and additional upland buffers, as shown in the plan CE-1 (Appendix B).

The conceptual plan for the wetlands mitigation is found in (Appendix B: Plan WM-2). The following direct improvements apply to the proposed wetlands mitigation:

- Construct lateral berms across the field that will contain filter curtains to interrupt the hydrologic drainage in the top 18" of the soil.
- Plant the field with typical wetlands vegetation including Willow and Pin Oaks on forty foot centers to produce mast for wildlife food.
- Make selective plantings in the understory to increase cover and food values for wildlife.
- Planting will be developed to accommodate the hydrologic conditions and enhance micro-habitats.

A detailed plan for all proposed mitigation will be presented in the Banking Instrument.

We expect to construct the wetlands and begin the stream work in the September-October, 2008 timeframe with planting late fall 2008 and early spring 2009. We expect to receive a portion of credits upon completion of the Banking Instrument and additional credits after the construction and initial plantings. Further credits will be based on approval of the results by the MBRT. This will be detailed in the Banking Instrument.

We appreciate the MBRT's review of the existing conditions and their detail comments on the proposed mitigation plan. Also, suggestions, recommendations and thoughts for improving the mitigation proposal, including

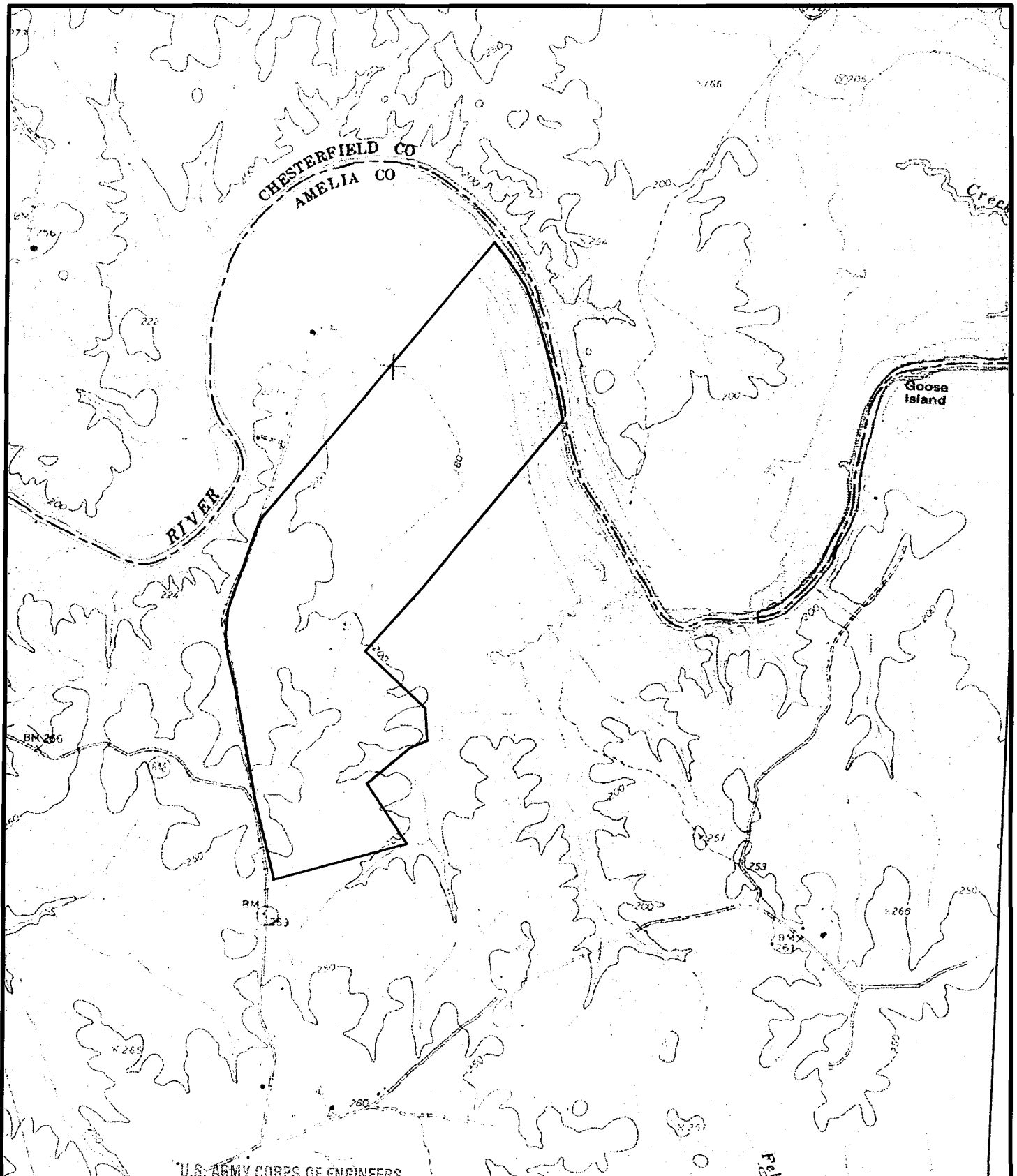


the goals and objectives will be thoroughly investigated, incorporated if possible and justification will be given when they cannot be included.

In the interim, if you have questions, comments or need additional information for your review, please call Jamie Hudson at (804) 740-9200 or email [jhudson@koontzbryant.com](mailto:jhudson@koontzbryant.com).

## **APPENDIX A**

USGS Topographic Map and Location Map



# RAGLAND FARM MITIGATION BANK

TOPOGRAPHIC MAP  
MAY 16 2008

LATITUDE: 37°16'59"  
LONGITUDE: 77°42'37"



**KOONTZ-BRYANT, P.C.**  
Site Solutions from Concept to Construction

DATE: APRIL 17, 2006

SCALE: 1"=2000'

COUNTY: AMELIA

JOB NO: 7056

USGS QUAD: WINTERPOCK

AREA: ±501 ACRES

LATITUDE: 37°16'59"  
LONGITUDE: 77°42'37"



**KOONTZ-BRYANT, P.C.**  
Site Solutions from Concept to Construction

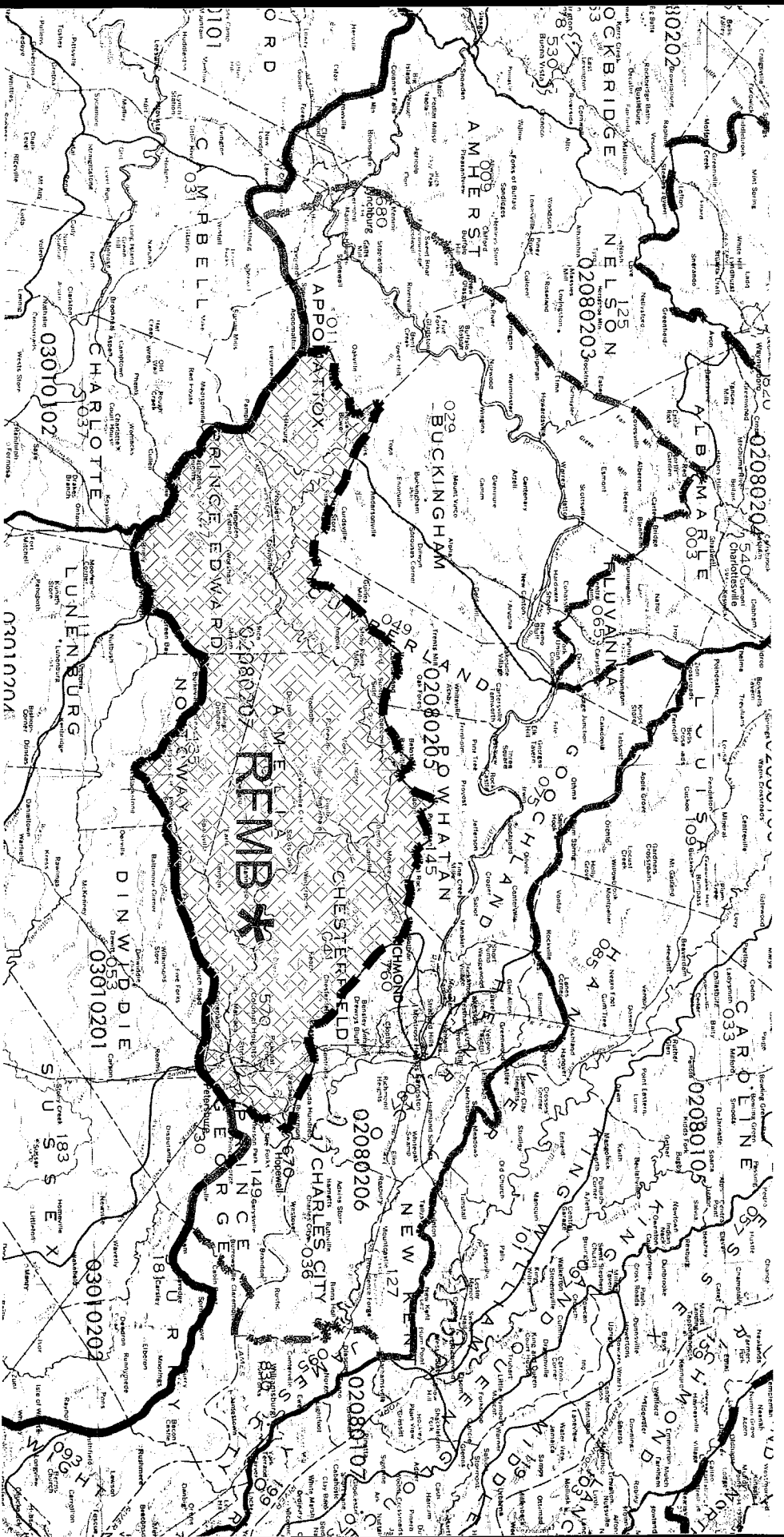
DATE: OCTOBER 30, 2007

SCALE: N/A

COUNTY: AMELIA COUNTY

**JOB NO: 7056**

SOURCE: VDOT COUNTY ROAD ATLAS



--- PRIMARY SERVICE AREA  
 --- OVERALL SERVICE AREA  
**BANK SERVICE AREA**  
 RAGLAND FARM MITIGATION BANK  
 AMELIA COUNTY, VA



MANAGED BY  
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**PROJECT DATA:**

PROPOSED AREA, BY USGS  
 HUC CODE, IN WHICH BANK  
 WOULD HAVE TRANSFERABLE  
 CREDITS AVAILABLE

HUC #02080203, #02080205,  
 #02080206, #02080207  
 (REFER TO MAP FOR  
 BOUNDARY LINE DETAILS)